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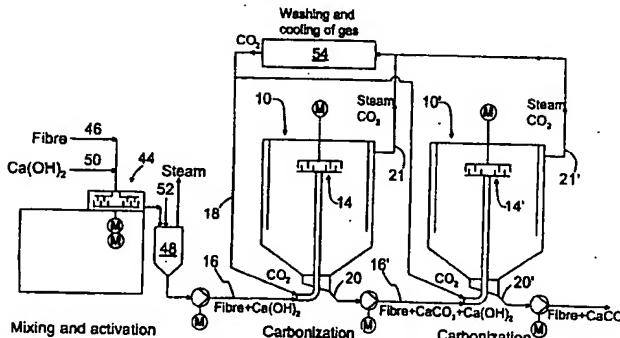
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(57) Abstract: A paper pulp used in papermaking is produced as follows: (a) the fibre material that is used as raw material for the paper pulp is fed into a precipitation reactor; (b) a reactive mineral material, such as calcium hydroxide ($\text{Ca}(\text{OH})_2$) is fed into the precipitation reactor; (c) the reactive mineral material and the fibre material are combined to form a fibre suspension in the precipitation reactor and/or before feeding these materials into the precipitation reactor, (d1) a gas is fed into the precipitation reactor, which gas contains the precipitant precipitating said reactive mineral material, such as carbon dioxide, in order to form a gas space containing said precipitant inside the precipitation reactor, and (d2) the fibre suspension fed into the precipitation reactor and/or formed there is dispersed, i.e. scattered, into small parts, such as drops containing solid matter and/or liquid and/or as particles, into said gas space, whereby the precipitated mineral material forms a filler on the fibres; (e) the treated fibre suspension is discharged from the precipitation reactor; and the filler-containing paper pulp formed by the fibre suspension is fed at a predetermined consistency to the forming section of the paper machine, water is removed from the paper pulp by allowing it to drain through a water permeable forming base, such as a wire, and the resulting paper web is dried and finished in order to produce a finished paper product.



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